



OUTREACH

Tools for Teachers—

Smart Email Provides Internet Access

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A national effort is underway to provide communications technology and networked information to the Kindergarten Through Grade 12 (K-12) education community. NASA's High Performance Computing and Communications Program sponsors the Learning Technologies Project (LTP) K-12 program that contributes to this national challenge.

About the program

The LTP K-12 program is a collaboration between government agencies and NASA centers to share NASA expertise and encourage local education initiatives at the state level. The LTP program includes videos and handbooks, Internet servers, and K-12 initiatives at eight NASA centers. The NASA center projects cover a broad range of categories such as education technology, teacher enhancement, curriculum improvement, student support, and systemic change.

The K-12 education technology project at NASA's Johnson Space Center (JSC) is the Internet Library Information Assistant (ILIAD), an electronic information assistant that retrieves and processes information from the Internet. It was specifically designed to provide Internet

resources for elementary and secondary teachers with limited computing equipment to enhance American education, promote use of the National Information Infrastructure, and disseminate NASA information, particularly math and science materials.

ILIAD sessions

An ILIAD session begins when it receives an email message from an authorized user. The query is launched to multiple Web search engines (AltaVista, Excite, Galaxy, InfoSeek, Inktomi, Lycos, Opentext, and Webcrawler) where documents are extracted from each engine and returned via the network to the ILIAD server. The returned Internet documents are analyzed for relevance, screened for duplicates, and then emailed to the requestor. ILIAD performs the analysis, duplication screening, and return functions using several interactive software components and a suite of specialized daemons.

Most ILIAD users receive the results of their searches as individual documents in their email. A special option permits you to receive answers to questions as hypertext markup

language (HTML) documents that can be viewed in a Web graphical browser. Whether the teacher opts for individual documents or HTML, time is saved because the query is launched and performed automatically and independently of any teacher interaction. Thus teachers can launch queries and return to their computers anytime to review the search results. This differs from most search engines that require sifting through multiple pages of search results online.

Although ILIAD was created to find math and science resources, teachers can search for a broad scope of information. Daily searches on ILIAD range through topics like agriculture, space information (Mars, Apollo, Mir, etc.), ice cream, recycling, tidal pools, and exotic animals, to name a few.

Getting ILLIAD

For those interested in testing the ILIAD service, email:

iliad@algol.jsc.nasa.gov

Put "start iliad" (no quotes) in the subject field and leave the body of the message blank. ILIAD

will mail you instructions on how to use the software. In addition to the standard email interface for low-end computers, there is also a Web interface to the ILIAD service at :

<http://www.jsc.nasa.gov/stb/iliad.html>

This technology is available for transfer to other educational facilities and networks. For further information contact the Information Technology Office at 713-483-8110.

For further information access Ask ILIAD, High Performance Computing and Communications Program, or the Information Infrastructure Technology and Applications (IITA) Web sites, respectively at:

<http://www.jsc.nasa.gov/stb/iliad.html>

<http://cesdis.gsfc.nasa.gov/hpccm/hpcc.nasa.html>

<http://iita.ivv.nasa.gov>

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